## **BERNINA®**

# Overlocker/Serger

Instruction Manual



BERNINA® 1100D BERNINA<sup>®</sup> 1100DA

## "IMPORTANT SAFETY INSTRUCTIONS"

When using an electrical appliance, basic safety precautions should always be followed, including the following: Read all instructions before using this overlock sewing machine.

## "DANGER \_\_\_\_\_ To reduce the risk of electric shock:"

- 1. The appliance should never be left unattended when plugged in.
- 2. Always unplug this appliance from the electric outlet immediately after using and before cleaning.
- 3. Always unplug before re-lamping. Replace bulb with same type rated max.15W (120V), max.10W (220-240V) for model 1100D. Max.12V/5W for model 1100DA.

## "WARNING \_\_\_\_\_ To reduce the risk of burns, fire, electric shock, or injury to persons:"

- 1. Do not allow this appliance to be used as a toy. Close attention is necessary when this appliance is used by or near children.
- 2. Use this appliance only for its intended use as described in this manual. Use only attachments recommended by the manufacturer as contained in this manual.
- 3. Never operate this appliance if it has a damaged cord or plug, if it is not working properly, if it has been dropped or damaged, or dropped into water. Return the appliance to the nearest authorized dealer or service center for examination, repair, electrical or mechanical adjustment.
- 4. Never operate the appliance with any air openings blocked. Keep ventilation openings of the sewing machine and foot control free from the accumulation of lint, dust, and loose cloth.
- 5. Keep fingers away from all moving parts. Special care is required around the sewing machine needle and knife.
- 6. Always use the proper stitch plate. The wrong plate can cause the needle to break.
- 7. Do not use bent needles.
- 8. Do not pull or push fabric while stitching. It may deflect the needle causing it to break.
- 9. Switch the sewing machine off "0" when making any adjustments in the needle area, such as threading needle, changing needle, threading looper, or changing presser foot and the like.
- 10. Always unplug the machine from the electrical outlet when removing covers, when covers are opened to raise the knife or thread the loopers, when lubricating or when making any other user servicing adjustments mentioned in the instruction manual.
- 11. Never drop or insert any object into any opening.
- 12. Do not use outdoors.
- 13. Do not operate where aerosol (spray) products are being used or where oxygen is being administered.
- 14. To disconnect, turn all controls to the off "0" position, then remove plug from outlet.
- 15. Do not unplug by pulling on cord. To unplug, grasp the plug, not the cord.
- 16. Basically, the machine should be disconnected from the electricity supply when not in use.
- 17. If the power cord of this appliance is damaged, it must be replaced with a special cord by your nearest authorized dealer or service center.
- 18. This appliance is provided with double insulation. (except USA/CAN)
  - Use only identical replacement parts. See instructions for servicing double insulated appliances.

## "SERVICING DOUBLE-INSULATED PRODUCTS (USA and Canada versions excepted)"

In a double-insulated product, two systems of insulation are provided instead of grounding. No grounding means is provided on a double-insulated product nor should a means for grounding be added to the product. Servicing a double-insulated product requires extreme care and knowledge of the system and should only be done by qualified service personnel. Replacement parts for a double-insulated product must be identical to those parts in the product. A double-insulated product is marked with the words "DOUBLE INSULATION" or "DOUBLE INSULATED".

The symbol  $\hfill\Box$  may also be marked on the product.

## "SAVE THESE INSTRUCTIONS"

"This overlock sewing machine is intended for household use only."

#### **Contents**

#### **Dear Customer**

Congratulations on your choice!

Your **BERNINA 1100D/DA** is made to the highest standards. It will cut, sew and neaten for you in one smooth operation giving a professional look to anything you make.

The 2/3/4-thread BERNINA 1100D/DA is particularly suited to sewing stretch fabrics. Let your wardrobe and home benefit from the 1100D/DA's superb sewing qualities.

Our comprehensive Instruction Manual introduces you step by step to the joys of overlocking and also gives you some useful sewing tips.

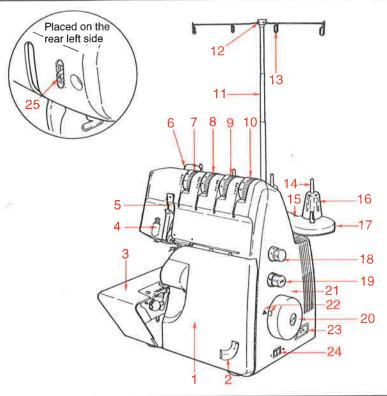
We wish you many happy hours of overlocking pleasure.

If this machine was purchased in a foreign country, please request an instruction manual in your own language from the national Importer or a Bernina dealer.

Safety regulations	1
Contents	2
Details of the machine  • Accessories	
Preparing the machine  • Foot control  • Thread stand  • Thread, cones, spools	4
Using the machine  • Main switch  • Presser foot lifter  • Changing the presser foot  • Looper cover  • Cloth plate  • Handwheel  • Swing out presser foot  • Raising the upper knife  • Inserting needles  • Needles	5 5 5 5 5 6
Threading  • Preparation  • Upper and lower looper  • Right and left needles  • Needle threader  ★ Automatic needle threader	8

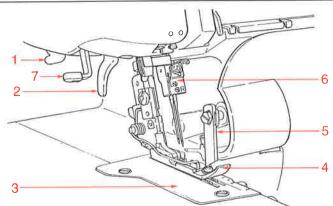
Trial sewing  Sewing test
Adjustments and settings  Stitch length 11 Cutting width 11 Differential feed 11 Gathering 12 Upper looper converter 12 Roll hemming 12 Presser foot pressure 12
Stitch chart
Practical sewing       • Sewing in tape       14         • Thread breakage       14         • Unpicking seams       14         ★ Blind stitch foot       15         ★ Elasticator       15
Maintenance  Changing the upper and lower knife
Trouble shooting guide17
Technical data17
Optional accessories

### Details of the machine



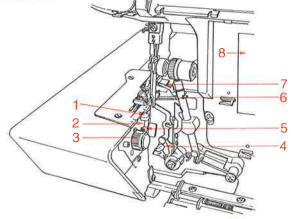
#### Details of the machine

- 1. Looper cover with built in knife guard
- 2. Looper cover opening indent
- 3. Cloth plate
- 4. Sewing light
- 5. Thread take-up cover
- 6. Presser foot pressure regulating knob
- 7. Left needle thread tension dial
- 8. Right needle thread tension dial
- 9. Upper looper thread tension dial
- 10. Lower looper thread tension dial
- 11. Retractable support rod
- 12. Thread guide support
- 13. Open thread guide
- 14. Spool holder pin
- 15. Foam pad
- 16. Anti vibration cone
- 17. Thread stand
- 18. Stitch length adjustment dial
- 19. Differential feed adjustment dial
- 20. Handwheel
- 21. Side cover
- 22. Matching up marks
- 23. Machine socket
- 24. Power/Light switch
- 25. Light switch (1100 DA only)



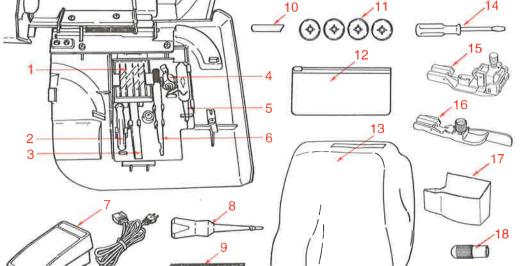
#### Details of the machine

- 1. Thread cutter
- 4. Presser foot
- 2. Presser foot lifter
- 5. Upper knife
- Stitch plate
- 6. Needle clamp
- Automatic needle threader for 1100DA only



#### View with looper cover open

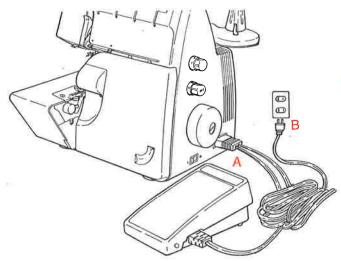
- Selection lever for overlocking or roll hemming
- 2. Lower knife
- 3. Cutting width adjusting dial
- 4. Lower looper auto threader
- 5. Lower knife setscrew
- 6. Lower looper
- 7. Upper looper
- 8. Threading diagram



#### Accessories

- 1. Needle set 130/705H
- 2. Small screwdriver
- 3. Tweezers
- 4. Upper looper converter
- 5. Needle threader for 1100D only
- 6. Brush/needle inserter
- 7. Electronic foot control
- 8. Oiler
- 9. Nets
- 10. Lower knife
- 11. Spool caps
- 12. Accessory bag
- 13. Dust cover
- 14. Large screwdriver
- 15. Elasticator \*
- 16. Blind Stitch foot \*
- 17. Waste collector \*
- 18 Bulb holder for 1100DA only

## Preparing the machine / Using the machine



#### Attaching the foot control

Plug foot control into the machine socket (A) and then into main socket (B). The foot control regulates the sewing speed. The sewing speed can be adjusted by increasing or decreasing the pressure on the foot control.

#### **M** "WARNING"

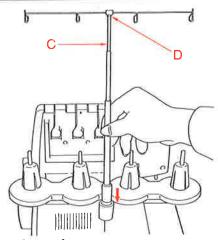
This appliance has a polarized plug (one blade wider than the other). To reduce the risk of electric shock, this plug is intended to fit in a polarized

Polarized main socket

Polarized plug
(for USA, Canada only)

main socket only one way. If the plug does not fit fully in the polarized main socket, reverse the plug. If it still does not fit, contact a qualified electrician to install the proper polarized main socket. Do not modify the plug in any way. (for USA, Canada only)

\* For the BERNINA 1100D/DA use only the foot control model YC-482 (USA, Canada), YC-483N (220-240V).



#### Thread stand

Push the support rod firmly into the socket on the back of the machine.

Raise the support rod (C) fully, turning slightly until the position catches engage. Position the thread guide (D) on the thread stand so that the arrow is to the front.



## Waste collector (1100DA)

Clip the waste collector into the opening on the looper cover. It catches the cut-off fabric as you sew, keeping your working area neat and tidy.



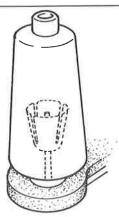
#### Thread / cones / spools

The anti-vibration cone should be used with the wider edge at the bottom on the spool holder pin when sewing with cones.



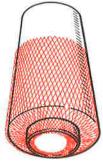
#### **Household spools**

Remove the anti-vibration cones. Place spools and spool holder pins and push the spool caps on with the rounded side downwards.



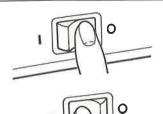
#### Large spools

If large industrial spools are used, position the anti-vibration cone upside down on the spool holder pin, i.e. with the wider edge at the top.



#### Thread net

If the threads slip and get twisted, cover the looper spools with the net supplied in the accessory bag.

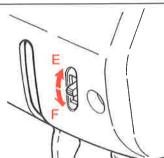


#### Power/light switch

The power/light switch is conveniently placed on the handwheel side of the machine in front of the socket.

0 = Off

I = On with light (1100D)



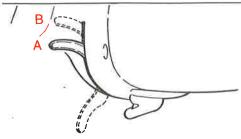
#### Light switch for 1100DA only

The light switch is placed on the rear left side of the machine, above the presser foot lifter.

E = On

F = Off

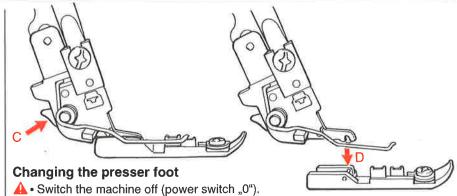
## Using the machine



#### Two step presser foot lifter with integrated front foot lift

To raise the presser foot, lift the presser foot lever on the rear of the machine, until it engages (A). It can be raised again to the maximum height and held in this position to provide more space between presser foot and stitch plate (B). When the foot is raised A and B, the front of the foot is automatically lifted.

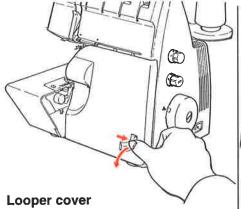
Note: When the presser foot is raised, all the tensions are released making it easier to thread the machine.



· Raise the presser foot.

• Turn handwheel towards you until needles are fully raised. Match the matching up marks on handwheel and side cover.

Press the catch (C) to release the presser foot from the clamp. Raise the presser foot shank to the highest position (B) and remove the presser foot to the left. To attach the presser foot, place it under the shaft. The groove in the shaft should line up exactly with the presser foot pin (D). Lower the shank and the presser foot will engage automatically.



To open press to the right with your thumb in the indent provided and tilt the cover towards you. To close push it up and press lightly to the right.

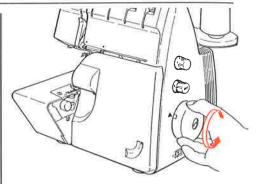
The cover engages automatically.



#### Cloth plate

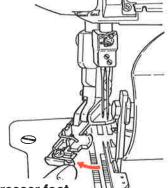
Opening and closing the cloth plate: Opening: Push the cloth plate to the left. Closing: Push the cloth plate to the right. Safety switch 1100DA: The machine does not run when the clothplate is opened.

A Caution! Moving parts - To reduce risk of injury, switch machine off("0") before servicing and when opening the looper cover or cloth plate. Close before using. Safety switch 1100DA: The machine does not run when the looper cover is opened.



#### Handwheel

The handwheel turns forward, i.e., in the same direction as on a household sewing machine.



Swing - out presser foot

The swing-out presser foot (exclusive to BERNINA) provides easy access for threading needles or loopers. It is also easier to change the needles and insert tape or elastic into the guide on the foot.

To position for sewing:

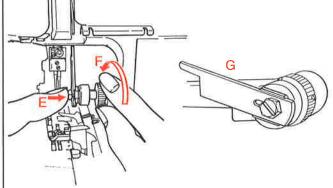
the sewing position.

• Push the foot from left to right.

· Lower the foot. It will engage into

To swing out:

- Raise the needles. Match the matching up marks on handwheel and side cover.
- · Raise the presser foot and swing it out to the left.

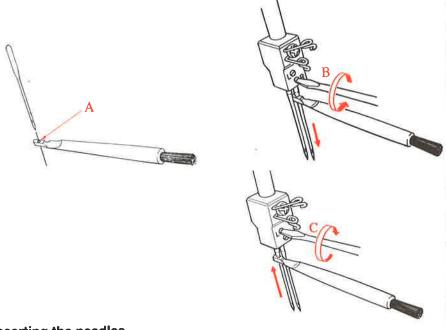


#### Raising the upper knife

- Switch the machine off (Power switch "0").
- Turn the handwheel towards you until the needles are fully raised.
- Open the looper cover.

Press the upper knife holder (E) to the right. Turn the knob clockwise (F) until the knife is in the position illustrated (G).

## Using the machine / Threading



#### Inserting the needles

Needles can be inserted quickly and easily with the practical needle inserter (A).

- ♠ Switch machine off (Power switch to "0").
- Disconnect machine from electricity supply.
- Turn handwheel towards you until needles are fully raised. Match the matching up marks on handwheel and side cover.
- Lower the presser foot.

Using the small screwdriver, loosen the needle setscrews and remove the needles (B). Place the right-hand needle, flat side towards the back, into the hole of the needle inserter and insert the needle as far as possible into the needle clamp. Tighten the setscrew lightly and then insert the left-hand needle in the same way and tighten both setscrews (C).



#### Needle and machine

Your BERNINA 1100D/DA is equipped with needle system 130/705H (household needles).

These should be purchased when replacement needles are required.

Use needles No.70-90 on your BERNINA 1100D/DA.

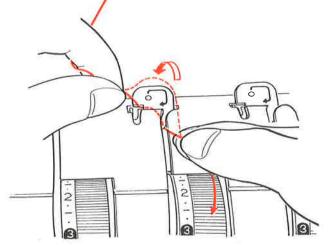
#### Preparations/Tips

▲ • Switch the machine off ( Power switch to "0").

- Support rod with thread uide must be fully raised.
- Open the looper cover.
- Turn the handwheel towards you until the needles are fully raised. Match the matching up marks on handwheel and side cover.
- Raise the upper knife.
- Raise the presser foot. The tension is automatically released.
- Swing out the presser foot.

Thread the machine carefully and in the correct sequence. Invaluable threading aids simplify threading:

- Colored threading illustration.
- · Color coded thread path on the machine.
- Threading accessories.
- Automatic needle threader (1100DA).

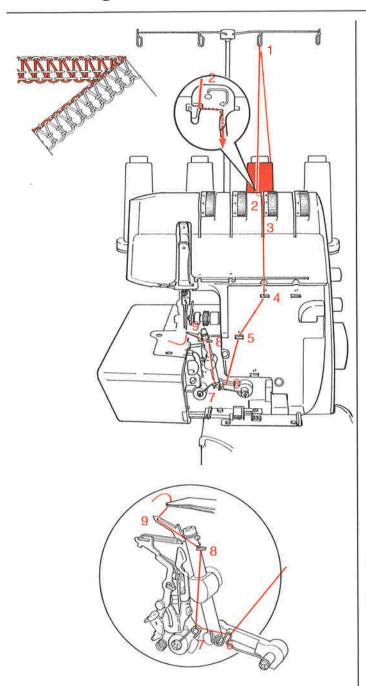


#### First thread guide on the machine (lay-in threading)

The thread guides on the top of the machine are color coded and simple to thread.

Hold the thread with both hands and slip into the appropriate guide from back to front in the direction of the arrow and pull gently.

## **Threading**



#### 1. Upper looper thread, blue markings

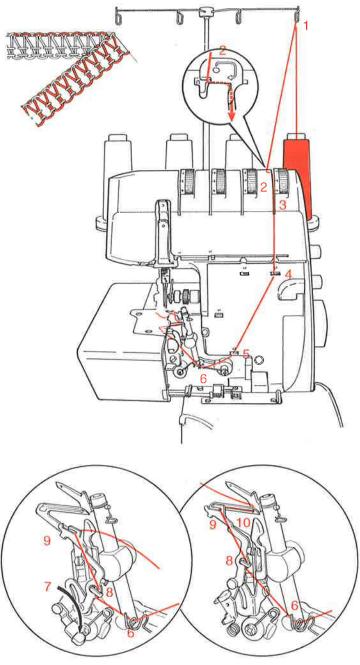
Place the spool on the spool holder pin as illustrated.

- (1) Bring the thread up from the spool and lay it from the back to the front into the guide (second from right).
- (2) Thread the first machine guide.
- (3) Slip the thread through the groove.
- (4,5,6,7,8) Thread the guides.
- (9) Turn the handwheel towards you until upper looper is in the position as illustrated.

Thread the looper eye and place the thread underneath the presser foot.

#### Note:

Do not thread the upper looper when sewing with the upper looper converter.



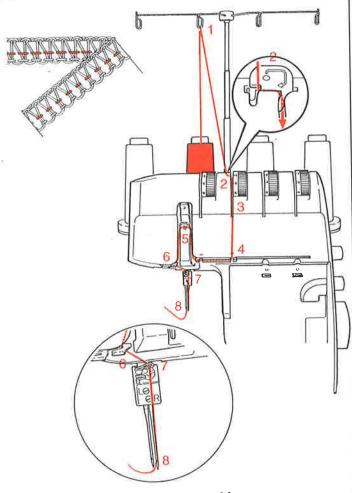
#### 2. Lower looper thread, red markings

Place the spool on the spool holder pin as illustrated.

- (1) Bring the thread up from spool and lay it from the back to the front into the guide (right one).
- (2) Thread the first machine guide.
- (3) Slip the thread through the groove.
- (4,5,6) Thread the guides.
- (7) Press the lever of the auto threader down.
- (8,9) Thread the guide and then the slit on the threader. Push the auto threader lever up to return it to its normal position.
- (10) Thread the lower looper eye and place the thread underneath the presser foot.

Note: If the lower looper has to be re-threaded, cut both needle threads off at the needle and remove surplus thread from below. Thread the lower looper and then re-thread the needles.

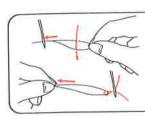
## **Threading**



#### 3. Right - hand needle, green markings

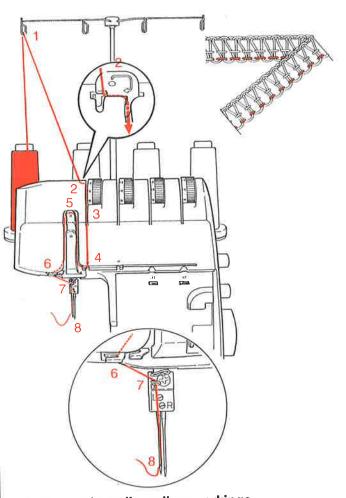
Place the spool on the spool holder pin as illustrated.

- (1) Bring the thread up from the spool and lay it from the back to the front into the guide (second from left).
- (2) Thread the first machine guide
- (3) Slip the thread through the groove.
- (4,5) Take the thread under the thread guide plate and through the take up.
- (6) Thread the guide.
- (7) Thread the guide on the needle clamp.
- (8) Turn the handwheel towards you until the needles are fully raised. Match the matching up marks on handwheel and side cover. Thread the right-hand needle.
- (9) Place the thread underneath the presser foot.



#### Needle threader for 1100D

Insert thread into threader. Push the rigid end of the threader from front to the back through the looper or needle eye and pull it completely through the eye.



## 4. Left - hand needle, yellow markings

Place the spool on the spool holder pin as illustrated.

- (1) Bring the thread up from the spool and lay it from the back to the front into the guide (left one).
- (2) Thread the first machine guide.
- (3) Slip the thread through the groove.
- (4,5) Take the thread under the thread guide plate and through the take up.
- (6) Thread the guide.
- (7) Thread the guide on needle clamp.
- (8) Turn the handwheel towards you until the needles are fully raised. Match the matching up marks on handwheel and side cover. Thread the left-hand needle.
- (9) Place the thread underneath the presser foot and swing back the presser foot. Lower presser foot.

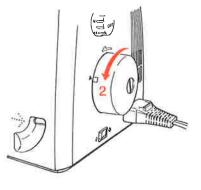
When threading is complete, lower the upper knife and close the looper cover.

#### Note:

If the lower looper has to be re-threaded, cut both needle threads off at the needle and remove surplus thread from below.

Thread the looper and then re-thread the needles.

#### Automatic needle threader for 1100DA



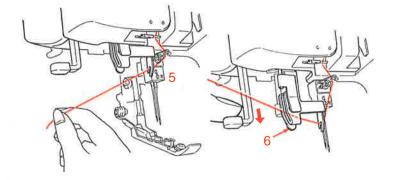
#### Automatic needle threader for two needles

- (1) Lower the presser foot
- (2) Raise the needles. Match the matching up marks on handwheel and side cover.



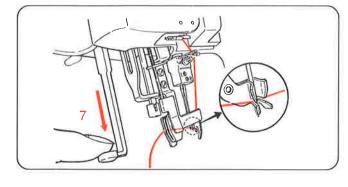
#### Threading the right-hand needle:

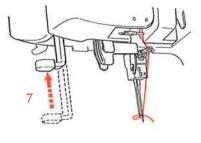
- (3) Follow threading sequence points from 1 to 8 as illustrated (see page 7, 8)
- (4) Push positioning lever to position R for right-hand needle.
- (5) Lay the thread from bottom to top in the guide on the threader.
- (6) Guide the thread along the groove from bottom to top into the last guide until it engages in the pre-tension.
- (7) Press the threader lever down and then let it slide up to its original position.
- (8) The thread forms a loop behind the needle eye. Use the tweezers to pull the loop thereby pulling the thread through the needle eye.



#### Threading the left-hand needle:

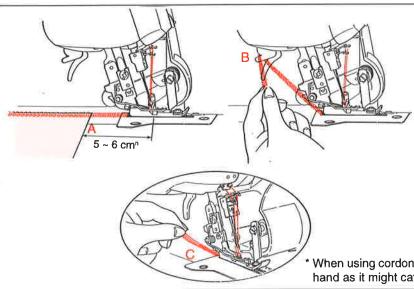
- (3) Follow threading sequence points 1 to 8 as illustrated (see page 7, 8).
- (4) Push positioning lever to (position L) for left-hand needle.
- (5) Lay the thread from bottom to top in the guide on the threader.
- (6) Guide the thread along the groove from bottom to top into the last guide until it engages in the pre-tension.
- (7) Press the threader lever down and then let it slide up to its original position.
- (8) The thread forms a loop anind the needle eye. Use the tweezers to pull the loop thereby pulling the thread through the needle eye.







## **Trial sewing, Thread tension**

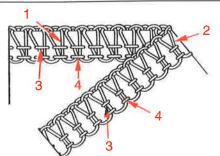


#### Sewing test

After threading make a trial run. Always use a double layer of fabric to check the stitch formation and thread tension properly.

- Switch the machine on ("I").
- Set all tensions to 4.
- Stitch length, differential, cutting width (see following page).
- · Lower the knife.
- Lower the presser foot.
- · Raise the front of the presser foot slightly with your thumb and position the fabric under the foot just up to the knife. Sew.
- At the end of the seam continue sewing a 5 6 cm (2 - 2 1/2") long thread chain (A).
- Holding the fabric in one hand, pull the thread chain over the thread cutter (B).

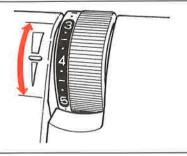
When using cordonnet or the like, pull out the thread chain carefully (C) by hand as it might catch in the stitch plate.



#### Check your trial run

- 1. Upper looper thread (blue)
- 2. Lower looper thread (red)
- 3. Right-hand needle thread (green)
- 4. Left-hand needle thread (yellow)

Perfect stitch formation is when both looper threads meet at the fabric edge. The needle threads form straight stitches for a stretchy and durable seam.



#### Thread tension

Thread tension should be properly adjusted to suit the various types of work. The ideal tension setting for most fabrics and threads is between 3 and 5. However this can vary quite considerably when special threads such as filament, woolly nylon, buttonhole twist (cordonnet), pearl yarn or decorative threads are used. Infinitely variable adjustments can be made from 1 - 9.

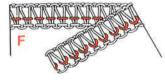
Turn the dial downwards for less tension.

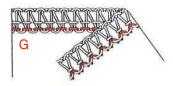
Turn the dial upwards for more tension.

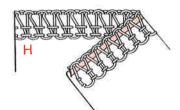


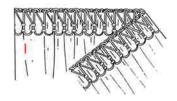










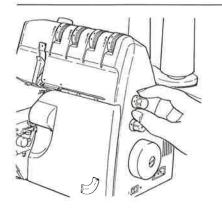


#### Adjusting the thread tension

Turn the tension dials by only half or one number, then test sew again and check the result.

- The loops are formed on the underside. Tighten the upper looper thread tension, (blue) or loosen the lower looper thread tension, red (D).
- The loops are formed on the upper side. Tighten the lower looper thread tension, (red) or loosen the upper looper thread tension, blue (E).
- The right-hand needle thread forms loops on the underside. Tighten the right-hand needle thread tension, green (F).
- The left-hand needle thread forms loops on the underside. Tighten the left-hand needle thread tension, yellow (G).
- The edge of the fabric curls up, tension of both looper threads is too tight:
- Loosen upper and lower looper thread tension, blue and red
- The fabric puckers during sewing: Loosen the right- or left-hand needle thread tension, green or yellow (I).

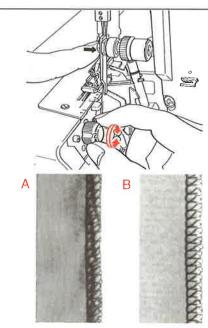
### Adjustments and settings



#### Stitch length

It can be adjusted while sewing.

The stitch length is infinitely variable from 1 - 4 mm. Most overlock work is done with a basic setting of 2.5 mm.

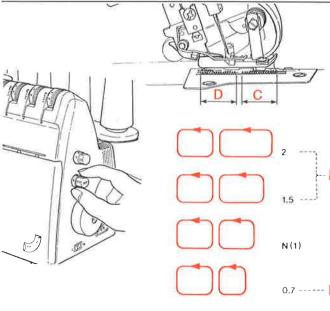


#### **Cutting width**

- Switch the machine off ( Power switch "0").
- Raise the upper knife.
- Turn cutting width adjustment dial in the desired direction.
- · Lower upper knife.
- 1 = 3 5 mm seam width
- 2 = 4 6 mm seam width
- 3 = 5 7 mm seam width

The position of the lower knife determines the width of the seam.

Reduce the cutting width if the edges of fine fabric curl up when being sewn (A). Increase the cutting width if the loops seem to be too loose (B).



#### Differential feed

There are two feed dogs one front (C) and one rear (D). The two feed dogs move independently and the distance each feed dog travels during one complete movement can be adjusted. The differential feed prevents fluting or waving in knitted or stretch fabrics and movements between the layers of fabric.

It also ensures pucker-free seams in smooth fabric such as nylon or closely woven fabric (E).

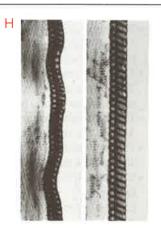
#### Perfectly flat seams in knits or stretch fabrics.

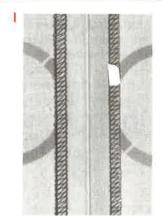
The distance travelled by the front feed dog should be greater than that of the rear feed dog. The front feed dog, therefore, feeds an amount of fabric which the rear feed dog can take up behind the needle without stretching the fabric.

#### Pucker - free seams in nylon or closely woven fabrics.

The distance travelled by the rear feed dog should be greater than that of the front feed dog. The front feed dog, therefore, holds the fabric back so that the rear feed dog can take it up behind the needle without any puckering (F).









#### Adjusting the differential feed

The differential feed can be adjusted by simply turning the differential feed adjustment dial in the direction desired. Always make a trial run. The differential feed is infinitely variable and can be adjusted while sewing.

	Effect	Fabric
2	Wave-free seams (G)	Thick wool knits, hand knitted articles, very stretchy fabrics
1.5	Wave-free seams (H)	Cotton, silk, synthetic jersey, sweatshirt fabrics and fine knits
N	Normal feed (I)	Woven fabrics

## Adjustments and settings



#### Gathering

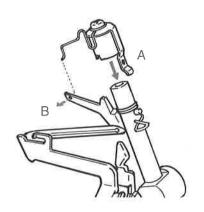
Using the differential feed, a single layer of fabric can be gathered before sewing it to the garment.

For example, sleeve heads and lower edges, yokes, lace edging or frills.

Adjustment:

- Stitch:4-thread overlock
- Differential feed: 2
- Stitch length: 3 4
- Cutting width: 2 3

Increase the needle thread tension (6 - 8) for a tighter gather.

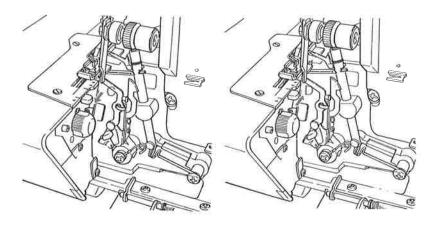


#### Upper looper converter

Use the upper looper converter to sew stitches with one looper thread, such as 2-thread roll hem, 2-thread flatlock and overlock.

- Turn the handwheel to lower the needles.
- Switch the machine off ("0").
- Open the looper cover.
- Attach the converter (stored in looper cover) to the upper looper arm (A). Insert the wire hook into the upper looper eye (B) from back to front.

The upper looper has now been converted, i.e., it no longer carries thread but it diverts the lower looper thread so that loops are formed round the edge of the fabric.



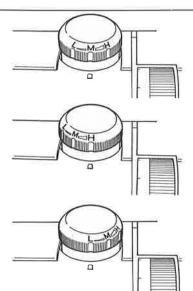
#### **Roll hemming**

- Turn the handwheel towards you until the needles are fully raised.
- For roll hemming, pull the selection lever to the front marking on the stitch plate, furthest from the presser foot (C).
- For overlocking, push the selection lever to the rear marking on the stitch plate, nearest to the presser foot (D).

The roll hemmer is fully integrated in the machine.

The edge of the fabric will be automatically rolled over, producing a very narrow, fine seam or hem.

Roll hemming is ideal for finishing edges on all fine fabrics, such as evening clothes, lingerie, scarves, frills and also for curtains and napkins.



#### Presser foot pressure

The presser foot pressure is factory adjusted to a medium setting.

Should you wish to adjust it, simply turn the knob in the direction desired:

Position of knob for normal pressure (M) = Medium.

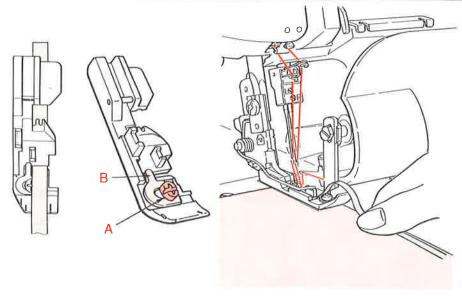
More pressure: for thick or stiff fabrics such as denim, tweed, firm linen (H) = High.

Less pressure: for light-weight or sheer fabrics and knits (L) = Low.

## Stitch Chart

Stitch	Stitch width	Thread tension	Basic settings
4-thread overlock with integrated safety seam	5 -7 mm, right and left needles	Left needle (yellow) 3 - 5 Right needle (green) 3 - 5 Upper looper (blue) 3 - 5 Lower looper (red) 3 - 5	Stitch length: 2.5 Cutting width: 2 Differential: N - 2 (knits) 0.7 - N (woven)
3-thread super stretch	5 - 7 mm right and left needles	Left needle (yellow) 3 - 5 Right needle (green) 3 - 5 Lower looper (red) 3 - 5	Stitch length: 2.5 Cutting width: 1- 2 Differential: N - 2 Upper looper converter
3-thread overlock	3 - 5 mm right needle, 5 - 7 mm left needle	Left needle (yellow) 3 - 5 Right needle (green) 3 - 5 Upper looper (blue) 3 - 5 Lower looper (red) 3 - 5	Stitch length: 2.5 Cutting width: 2 Differential: N - 1.5 (knits) 0.7 - N (woven)
3-thread flatlock	3 - 5 mm right needle, 5 - 7 mm left needle	Left needle (yellow) 1 - 2 Right needle (green) 1 - 2 Upper looper (blue) 3 - 5 Lower looper (red) 7 - 9	Stitch length: min. 2.5 Cutting width: 2 Differential: N
3-thread narrow seam	1.5 mm right needle	Right needle (green) 3 - 5 Upper looper (blue) 3 - 5 Lower looper (red) 3 - 5	Stitch length: 1 - 1.8 Cutting width: 1-1.5 Differential: N - 0.7 Stitch lever: roll hem
3-thread roll hem	2 - 3 mm right needle	Right needle (green) 3 - 5 Upper looper (blue) 3 - 5 Lower looper (red) 7- 9	Stitch length: 1 - 1.8 Cutting width: 1-1.5 Differential: N-0.7 Stitch lever: roll hem
2-thread wrapped overlock	3 - 5 mm right needle, 5 - 7 mm left needle	Left needle (yellow) 3 - 5 Right needle (green) 3 - 5 Lower looper (red) 2 - 4	Stitch length: 2.5 Cutting width: 2 Differential: N - 1.5 (knits) 0.7 - N (woven) Upper looper converter
2-thread flatlock	3 - 5 mm right needle, 5 - 7 mm left needle	Left needle (yellow) 1 - 2 Right needle (green) 1 - 2 Lower looper (red) 3 - 5	Stitch length: min. 2.5 Cutting width: 2 Differential: N Upper looper converter
2-thread roll hem	1.5 mm right needle	Right needle (green) 3 - 5 Lower looper (red) 3 - 5	Stitch length: 1 - 1.8 Cutting width: 1 - 1.5 Differential: N - 0.7 Stitch lever: roll hem Upper looper converter

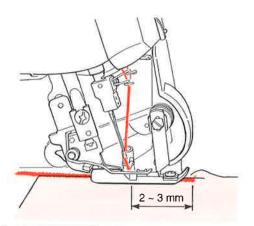
## Settings, practical sewing



#### Sewing in tape

The standard presser foot is equipped with a tape guide. A tape can be sewn into the shoulder or side seams of garments made from knits or stretch fabrics to prevent stretching.

- Turn handwheel towards you until needles are fully raised. Match the matching up marks on handwheel and side cover.
- Raise the presser foot and swing it out.
- Lay the tape under the presser foot and slide it carefully into the tape slot.
- Swing back the presser foot and lower it.
- Sew a few stitches on the tape.
- Loosen the setscrew (A) and adjust the tape guide to suit the width of the tape (B).
- Re-tighten setscrew.
- Raise the tip of the presser foot and place work underneath. Sew.

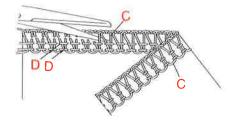


#### Thread breakage during sewing

Sew off immediately at an angle and remove the work. Re-thread.

If the lower looper thread has broken, cut off both needle threads at the needles and remove surplus thread from below.

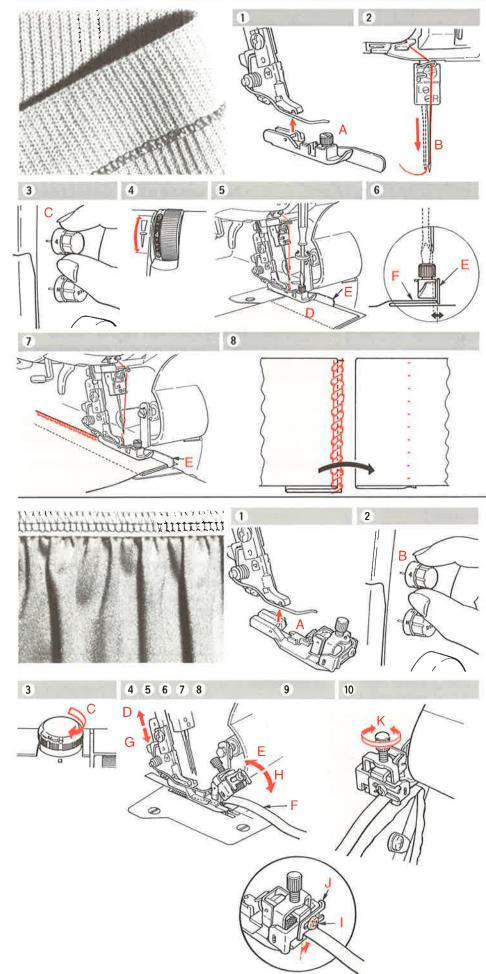
First thread the looper and then the needles. Start sewing again about 2 – 3 cm in front of the break.



#### Unpicking seams

Using sharp scissors, cut the loops (C). Pull the needle thread (D) and the stitches will come undone.

## Settings, practical sewing \*1100DA.



#### **Blind stitch**

- Attach the blind stitch presser foot (A) (See page 5 changing the presser foot).
- Thread the machine for a 3-thread overlock using the right-hand needle (B) only.
- 3. Turn the stitch length adjustment dial (C) to 4.
- 4. Set the thread tension:
   Needle thread 3-4
   Upper looper thread 3-5
   Lower looper thread 4-5
- 5. Fold the fabric and place it (D) under the presser foot.
- 6. Adjust the guide plate (E) to the left or right until the fold of the fabric (F) is in a line with the right-hand needle.
- 7. Sew the fabric so that the fold is always along the guide (E).
- 8. Unfold the fabric and press lightly on the back side.

#### Elasticator

Use a 3- or 4-thread overlock. For the 3-thread overlock use the right-hand needle for 5-7 mm wide elastic. 4-thread for 5-12 mm elastics.

- 1. Attach the elasticator (A) (see page 5 changing the presser foot).
- 2. Turn the stitch length adjustment dial (B) to 4.
- 3. Turn the presser foot pressure regulating knob (C) to position H (see page 12).

#### IMPORTANT:

After completing the work with the elasticator re-set the presser foot pressure.

- 4. Raise the needle to its highest position (D).
- 5. Raise the roller guide (E).
- 6. Lift the presser foot.
- 7. Insert the elastic (F) into the slot along the left edge.
- 8. Lower the presser foot (G) and sew a few stitches until the elastic lies along the right edge of the slot.
- 9. Lower the roller guide (H).
- Loosen the setscrew (I) and adjust the guide plate (J) to the width of the elastic. Re-tighten setscrew.
- 11. Make a trial run.

Loosen the pressure adjustment setscrew (K) fully, place the fabric under the foot so that the edge of the fabric will be cut off. Sew a few stitches then turn the pressure adjustment set screw clockwise until the gathering is as required.

Important:

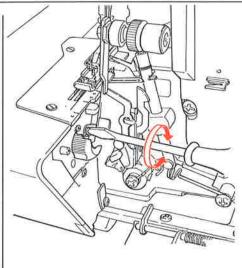
Important.



## **WARNING** Please refer to the safety instructions.

#### Changing the upper knife

The upper knife (moving knife) is made from special hardened material. Should it get damaged, it can be replaced by your local Bernina dealer.



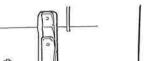
#### Changing the lower knife

- A Disconnect machine from electricity supply.
- Turn handwheel towards you until needles are fully raised. Match the matching up marks on hand wheel and side cover.
- Raise the upper knife.

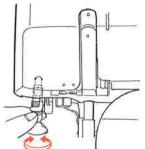
Loosen the setscrew on the lower knife retaining plate. Remove the lower knife. Fit the replacement knife (from accessory bag) in the groove so that the sharp edge is in line with the stitch plate.

Re-tighten the setscrew (see page 1).





For 1100DA



#### Replacing the bulb

• Switch machine off. (Power switch to "0").

A Disconnect machine from electricity supply.

#### 1100D:

Unscrew the bulb and replace it with a new one. The bulbs are max.15 Watt for 120V machines and max.10 Watt for 220-240V machines. They are available from your local dealer.

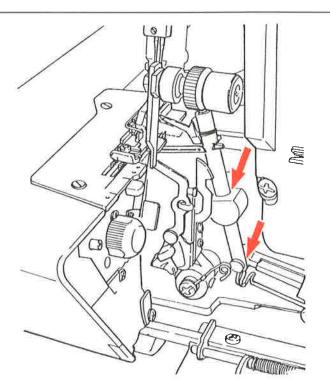
#### 1100DA:

Using the special bulb holder provided in the accessory bag, press upwards against the bulb, turn to the left and remove the bulb.

Place the new bulb on the holder. Insert into the bulb fixation, press upwards and turn to the right until the bulb engages.

Replacement bulbs for your BERNINA overlocker are available from your BERNINA dealer.

Use max.12 V/5 Watt bulbs.



#### Cleaning and lubricating

#### ▲ Disconnect machine from electricity supply.

During sewing, dust and fluff collect in and on the machine. This should be removed regularly. Your overlock machine requires very little lubrication. Now and then, lubricate only the points illustrated.

Please refer to safety instructions on page 1.

## Trouble shooting guide / Technical data

Problem	Cause	Solution Page
	Looper or cloth plate cover is open	Close the looper or the cloth plate cover5
sew:	(1100DA). The main switch is not on. The machine is not plugged in.	Switch machine on. (Main switch to "I")
Fabric does not feed evenly	Differential feed is wrongly adjusted. Presser foot pressure is too low. Lower or upper knife is blunt or wrongly positioned.	Check the differential feed setting
Thread breaks	. Thread tension is too tight for the thread being used. The machine is not threaded correctly. Needles are incorrectly inserted.	Reduce thread tension
	Wrong needles.	Use needle system 130/705H6
Needles break	. Needles are bent or blunt, points are damaged.	Replace needles6
	Needles are not inserted correctly.	Insert needles fully into needle clamp with flat side to the back
	Fabric was pulled while sewing.	Guide fabric gently with both hands
Skipped stitches	<ul> <li>Needles are bent or blunt Wrong needles used.</li> <li>Presser foot pressure is too low.</li> </ul>	Replace the needles
Poor stitch formation	. Threads are not correctly between the tension dials.	Check if thread is lying between tension discs
	Thread has got caught.  Machine is incorrectly threaded.	Raise the presser foot and pull the thread 5. Check threading path of each thread 7,8. Check threading path of each thread 7,8.
Seams flute or wave, especially when sewing knits	. Fabric was pulled while sewing Presser foot pressure is too tight. Differential feed is set incorrectly.	Guide fabric gently Reduce presser foot pressure
Seams pucker	Needle thread tension is too tight. Differential feed is set incorrectly.	Reduce the needle thread tension
Fabric edges curl	Too much fabric is in the stitch. Thread tension is too tight. Stitch selection lever is on roll hem.	Reduce cutting width
Thread loops are tooloose	Too little fabric in the stitch.	Increase the cutting width11

Stitch choice	2 needles, 2 loopers: 4 thread overlock with integrated safety seam 1 needle, 2 loopers: 3 thread overlock, flatlock roll hem 1 needle, 1 looper: 2 thread overlock, flatlock roll hem 2 needles, 1 looper: 3 thread super stretch	
Needle system	130 /705 H	
Seam width	3 - 5 mm (2/3 thread overlock) 5 - 7 mm (4 thread overlock/ 3 thread super stretch)	
Stitch length	1 - 4 mm	
Differential feed	No waving or fluting in knits N - 2 No puckering 0,7 - N	
Presser foot lifter	5 mm	
Handwheel	rotates forwards	
Sewing speed	Up to 1500 s.p.m.	
Weight	8 kg	
Dimensions	300 (W) x 260 (D)x 290 (H) mm	
Foot control model nr.	YC-482 (USA and Canada only) YC-483N (220- 240V)	

We recent the right to make changes in the interest of technical progress

## **Optional Accessories**

